Right Mindfulness through Diagrams: Experimentation beyond Bare Attention

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Introduction

Many of us who practice mindfulness meditation would no doubt appreciate its benefits. For example, we may be less irritated/angry, able to tolerate creepy creatures, or increasingly more comfortable with thinking about our own deaths. Each one of us must be able to provide a list of benefits.

However, we may still be overwhelmed at times with certain negative feelings, e.g., virtually subconscious resistance to rejection, an often-camouflaged desire to revenge, or a subtle sense of pride. These could happen even when we think we are with non-judgmental, present-moment awareness (e.g., Kabat-Zinn, 1990; Gunaratana, 2002), also referred to as "bare attention" (Nyanaponika Thera, 1965). In addition, we may still speak and act in a destructive manner, again even when we think we are with bare attention. In a sense, the development of bare attention may be leading us to the realization that bare attention alone *cannot* eliminate these unhealthy mental conditions and actions altogether. That is, while bare attention may be an effective introductory step, there may be limitations inherent with this notion. Of course, there must be meditation teachers who teach mindfulness through bare attention *and* are able to guide us beyond such a stage. So, it may simply be the problem with us, the meditators/learners. In any case, mental training with bare attention would at least let us notice all these things; most (other) people are not even aware of anything like these most of the time. So, we must have made a progress. However, there must be more to explore.

While the idea of mindfulness as bare attention proliferates in many fields (e.g., Williams and Kabat-Zinn, 2013), a relatively small number of Buddhist monks started to voice warning (e.g., Bodhi, 2011; Sujato, 2005; Thanissaro, 2012; Wallace and Bhikkhu Bodhi, 2006). Some people complain that "mindfulness" is not the correct translation of the original Buddhist term, "sati." However, it is not really a translation issue; there seems something fundamental involved in this discussion. And for us, serious meditators, this can be a major turning point. In particular, Thanissaro Bhikkhu (2012) points out the importance of understanding "right mindfulness" in

the context of the original Buddhist tradition, emphasizing that mindfulness is not really passive, as associated with the notion of bare attention, but more *active*. Inspired by this point, this essay sketches my journey through a gradual transition along this line, using a lot of diagrams (schematic representations).

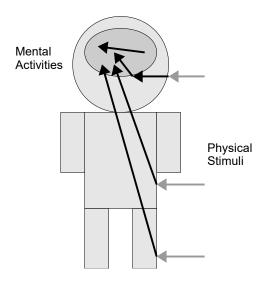
This essay is basically the study note for my own mental training. As such, there are certain limitations. There is a risk of oversimplifying complex processes and even making a mistake. In addition, there also are inherent limitations associated with the use of diagrams. Just like words, they are simply "concepts" and can only be a crude first approximation. They can never correctly represent the essence involved in a process. Furthermore, touching upon the original ideas of the Buddha mainly through Thanissaro Bhikkhu's interpretation and exposition (2012), this essay uses a radically simplified and modernized version of diagrams (if we can follow the originals without the help of additional materials, that must be better). A potential benefit of the present approach would be that the material be more readily understandable by people without a lot of Buddhist background; at the same time, a potential drawback would be that the presentation be inaccurate. Finally, the ideas and diagrams in this essay have been revised substantially over the past several years. Thus, the current ones too will surely be revised (and may be abandoned) in the future. In this sense, this essay will always remain as a preliminary version. Hopefully, the content is still useful for some meditators and for further discussion.

This essay will proceed in two parts. In *Part 1*, we gradually introduce diagrams using our own terminology, consisting of mostly modern, everyday terms. On the way, we hopefully generate sufficient thrust to shift our focus from bare attention to a more "active" approach to mindfulness. In *Part 2*, we discuss "right mindfulness" and other relevant Buddhist ideas in connection to the development in *Part 1*.

Part 1: In Plain English

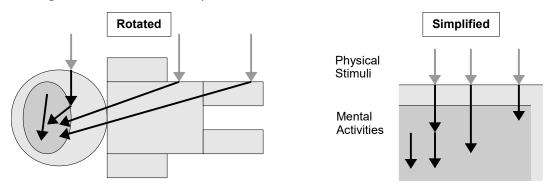
Introducing the Basic Diagram

Since the focus of this essay is on mental activities, we begin with a diagram involving them as shown below.

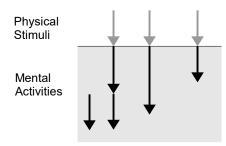


The above is a schematic representation of a person, who receives physical stimuli of various sorts (gray arrows), e.g., sight, sound, smell, taste, and touch, and develops a lot of mental activities (black arrows), e.g., sensation, feeling, perception, thought, and judgment. While a lot of mental activities originate with a physical stimulus or another mental activity, there may be a case where a mental activity occurs without such stimuli, shown as the topmost black arrow. For example, daydreaming may be in this category.

Next, the diagram is rotated and simplified as below.



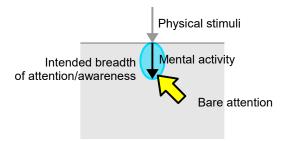
Since we are not concerned about whether all the mental activities occurs inside the brain (dark-shaded area), we can further simplify the diagram, i.e., eliminating the different shades of gray, as follows.



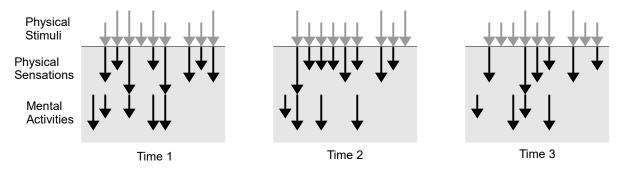
This is the basic configuration of the diagram. In the following sections, we will add more components as needed.

Mindfulness as Bare Attention

In this section, we briefly review a typical approach to cultivate mindfulness as bare attention, using the introduced diagram. Here is a basic configuration for characterizing bare attention for a single time frame.

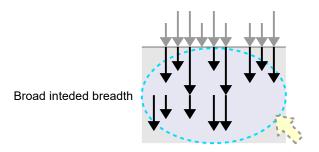


This shows that we apply our attention to a single mental activity, e.g., the breath, without any triggered mental activities, e.g., judgment. Here, the oval indicates the intended breadth of the attention or awareness; the thick arrow shows bare attention. Although this might appear straightforward, the reality is not. Our minds are enormously complex. We are constantly processing a huge number of physical stimuli and mental activities. If we take snap shots of our minds for three distinct time frames, an extremely simplified view might look like the following.



Under such a (normal) condition, it would be practically impossible for us to pay bare attention to any of the mental activities.

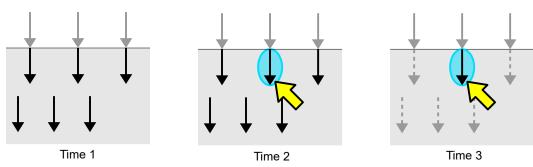
As practiced in certain meditation approaches, we could begin with a broad intended breadth of attention, as shown below.



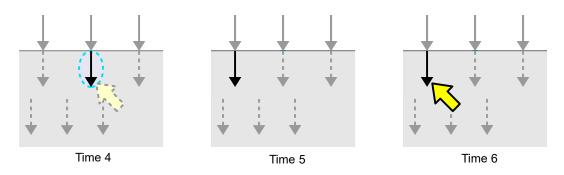
Again, the complexity of our minds would be an obstacle to our wish to cultivate bare attention. The dotted oval and thick arrow indicate that bare attention is not being established. This is why so-called mindfulness meditation involves some aspect of concentration; with more concentration, it would be more practical to develop bare attention.

Basic Mindfulness Meditation with Bare Attention

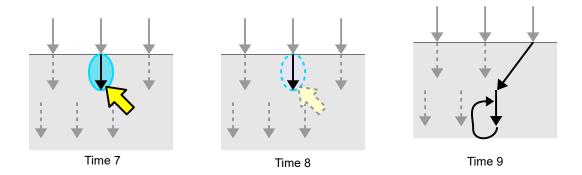
In order to establish bare attention, we normally set up a single, relatively narrow focus on a meditation object, e.g., the breath. As the concentration develops, other sensations and mental activities would subside as shown below (for the first three time frames).



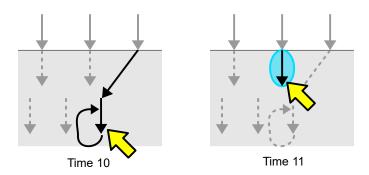
However, we are all too familiar with the presence of distractions.



Eventually, our attention on the breath will weaken and may disappear (Time 4). Often, some other sensations and/or mental activities have taken up our minds (Time 5). If we happen to remember what we are doing, we notice the distraction (Time 6).



At that point, we return our attention to the breath (Time 7). But the attention may be lost again (Time 8) and our minds may even be going in a circle for a long time (Time 9).



Again, if we notice the distraction (Time 10), we can return our attention to the breath (Time 11).

With sufficient effort and patience, we will develop the ability to pay bare attention to the breath or other mental processes. Although we do not repeat the (potential) benefits of bare attention, they are widely discussed in the literature.

Limitations of Bare Attention

If properly set in a solid program, there is no doubt that bare attention would pave the way to the goal of that program, be it a spiritual or a psychological one. For example, there are a large number of Buddhist monks and lay teachers who prominently use bare attention in their approaches possibly leading to "enlightenment." Even when bare attention is emphasized, though, their programs seem to be much more complex than that. So, bare attention may simply be an appealing entry point in their programs.

If we have been working hard mainly focusing our effort on bare attention, we must have developed a keen sense of registering various mental states and processes. However, this alone may not have uprooted the source of destructive speech and actions. Even if we can be aware of every instance of "bad" moments, that does not seem enough for us to completely eliminate them. Whatever it is, the source of problems seems *deeply* ingrained in our minds. We seem to

need a different or additional set of skills and effort.

Among the Buddhist monks and teachers, Thanissaro Bhikkhu (2012) is probably the most vocal about the limitations of emphasizing bare attention. Some of the points, as I understand, are as follows:

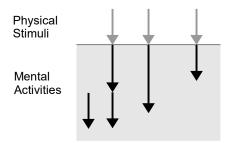
- Bare attention is a passive process. "Attention" as discussed by the Buddha is more active, closely associated with intention.
- According to the Buddha, in order to cultivate our minds, we need to **actively** train them, using try-and-error processes with frequent assessments.
- Even the practice of meditation is based on a **desire** to advance, e.g., psychologically or spiritually, and all desires would eventually result in subtle suffering. Meditation scheme solely dependent on bare attention cannot address this point. In a sense, such a scheme is not "big" enough as a platform to encompass the entire meditation practice.

In the following sections, we will revise the diagram so that we can re-interpret mindfulness as a more active mental process, involving a broader set of components.

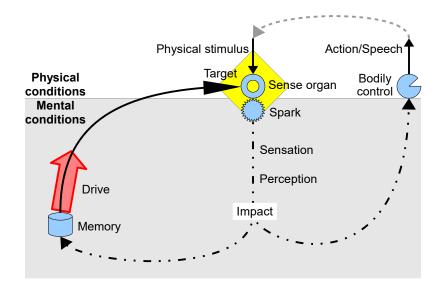
In addition to the references mentioned so far, there are some others relevant to the discussion of bare attention. These include Analayo (2003, 2013), Bhikkhu Bodhi (2011), Dreyfus (2011), Olendzki (2011), Purser and Milillo (2014), and Wallace and Bhikkhu Bodhi (2006). Note that these authors seem to have different levels of emphasis on bare attention. For example, while Analayo (2013) appear to be de-emphasizing bare attention in comparison to his earlier work (2003), his emphasis on bare attention does not seem completely changed. Some authors, e.g., Dreyfus (2011), address the limitations of bare attention in connection to compassion and morality. The focus of this essay is more about the active components involved in mindfulness.

Revised Diagram with Active Components

First, let us recall the basic diagram introduced earlier.



Next, still maintaining the overall organization, i.e., physical conditions at the top and the mental conditions in the shaded area below the horizontal line, we add more components as shown in the following diagram. Note that the diagrams in this essay are a visual aid and *not* a (neuro)scientific model of any sort.



As before, a physical stimulus is still represented as a downward arrow above the horizontal line. It reaches a sense organ, e.g., eye, ear, nose, tongue, skin, etc. (shown as a double circle or "eye"). At the sense organ, we register the stimulus (shown as a 24-point star or "bang"), which is referred to as "spark" here. The term "spark" is used as a metaphor of a spark that ignites in an automobile engine (internal combustion engine). Starting at a spark, there will be a chain of resulting mental activities, which are referred to as "impact" (shown in 2-dots-1-dash lines). For example, along the impact chain, the spark may be recognized as a sensation and a perception. Sensation is a more primitive and immediate reaction to a spark, including the quick differentiation of the stimulus as one of positive, negative, or neutral phenomenon. Perception is a more elaborate process, including labeling of the experience and cognitive assessment of the stimulus.

The impact of a spark may be physical and/or mental. For example, physical impacts may manifest through some sort of bodily control (shown as a partial circle pie or "mouth"), eventually realized as an action or speech. Note that the physical impact as action/speech may directly or indirectly affect various things surrounding us, including our sense organs; thus there is a grayed dotted arrow from action/speech to the physical stimulus. Mental impacts may eventually affect our memory (shown as a drum or "magnetic disk").

Now, the most important point of the new diagram is the inclusion of "drive" (shown as a very thick arrow) and "target" (shown as a long arrow pointing to the shaded diamond). Drive here is understood as the originating force behind all mental activities. Target here is understood as a process of orienting our drive, e.g., toward our sense organs. The act of orienting the drive is also referred to as "targeting." Note that both drive and targeting can be working below our awareness level, i.e., subconsciously. In fact, most of our mental activities are subconscious and often considered on "auto pilot." However, the drive and targeting can still be conscious with substantial effort, as discussed in the next section.

One may wonder why we use some *unusual* terms, e.g., drive, target, spark, and impact, to refer to certain mental processes. This is mainly to avoid our preconceptions associated with certain terms, such as intention, attention, and consciousness (used in both Buddhism and psychology). In *Part 2*, we will explore the connection to Buddhist terms.

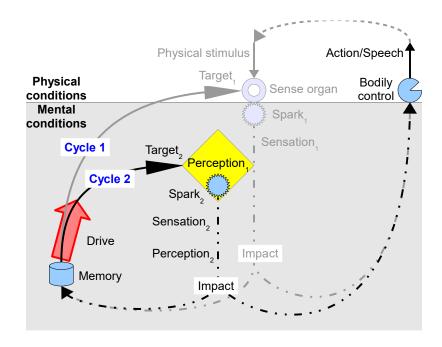
To summarize the discussion, the components involved in the above diagram are shown in a table format as follows.

Memory ↓				
Cycle of Mental Activation	Drive			
	Targeting			
	Target (Sense Organ)	← Physical Stimuli		
	Spark			
	Impact (including sensation/perception)			
↓				
Memory and Bodily Control				

There is a caveat. Although we refer to the process from drive to impact as a "cycle" here, it is not really a simple cycle; it may better be regarded as a network. For one thing, there are branches. For another, many of these cycles interact in a complex manner, as will be seen in later sections. In addition, these cycles would not occur neatly one after another; they may occur at any time independently. Still, it seems helpful to use the term "cycle" to refer to a set of activities in a concise manner.

Awareness of a Mental Process

As mentioned in the previous section, most of our mental activities occur below our awareness level. As many meditators emphasize bare attention, our ability to pay attention consciously is an important element in meditation. So, we try to represent our awareness in the new diagram. Here is one.



In this diagram, there are two cycles, Cycle 1 in gray precedes Cycle 2 in black. In Cycle 1, our subconscious drive is targeted at some sense organ, e.g., eyes. There, the impact of the physical stimulus begins as a spark. Then, the spark causes a sensation (including positive/negative/neutral reaction) and a perception of an object, e.g., as a dog. While Cycle 1 is going on, Cycle 2 begins with a conscious effort to become aware of the perception. In this case, instead of targeting a sense organ, our drive targets the perception of Cycle 1 (shown as perception₁ in the shaded diamond). There, a new spark₂ originates another chain of impacts. There will be sensation₂ and perception₂ associated with this conscious effort, and thus distinct from sensation₁ and perception₁. In particular, perception₂ is a cognitive process of registering perception₁ as being aware of the dog.

Awareness of pain would be analogous. When we become aware of pain, the drive to target the sense organ would be subconscious (Cycle 1). Then, the sensation of the pain would initiate the drive to target that sensation (Cycle 2).

In a similar way, we can also target any mental process in the shaded area. This includes, memory, drive, target, sensation, and perception. In addition, we can also target the bodily control mechanism as well, e.g., to change our bodily conditions. In general, our awareness can be considered as the impact of a conscious effort to target any mental process on an existing cycle. Many of these cases will be discussed later.

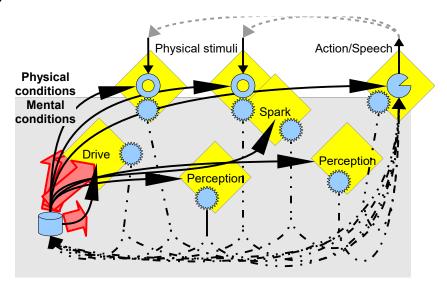
Just as in the case involving physical stimuli (as in the previous section), the case of targeting a *purely mental* process (as Cycle 2 in this section) is handled analogously, using the same terminology. This way, we make clear that the choice of a target is still the result of drive, albeit that may be subconscious. Reflecting the addition of purely mental processes as targets, we can revise the table in the previous section as follows.

Memory ↓				
	drive			
Cycle of Mental Activation	Targeting			
	Target (Sense Organ or Mental Process)	[← Physical Stimuli]		
	Spark			
	Impact (including sensation/perception)			
↓ Memory and Bodily Control				

Here, physical stimuli are in square brackets because they are not involved in purely mental processes.

Mindlessness: Ordinary Situation

At this point, let us consider the "ordinary" situation of, say, "mindlessness." As we noted earlier, our minds are enormously complex; all sorts of drive are targeting almost infinite number of sense organs and mental processes at all times, resulting in incredibly complex interactions among the involved processes. In addition, each instance of mental activation would take only a tiny fraction of a second. This results in a complex interaction that is changing constantly. A diagram representing a ridiculously simplified snap shot of an ordinary situation is shown below.

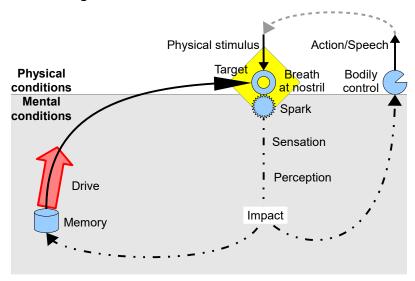


Here, many instances of drive to target different sense organs and mental processes are shown, but the order of the cycles is not shown here. At each target, there is a spark, which causes various impacts on bodily control and memory. All these interact in a complex manner. So, in

order to understand and cultivate our minds through meditation, we need to be able to simplify the picture, identify involved processes, and make necessary adjustments to the occurrences of mental activities.

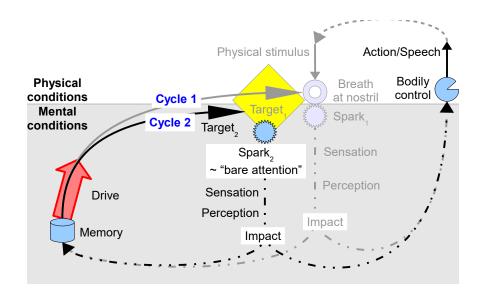
Basic Breath Meditation, Using the New Diagram

We now return to the basic breath meditation discussed earlier (in terms of bare attention), with the help of the new diagram.



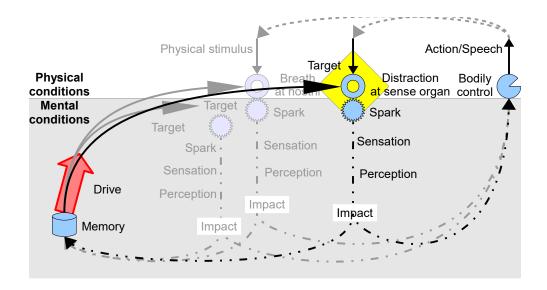
First, we have a desire (represented as drive here) to meditate on the breath, targeting an appropriate sense organ, e.g., at the tip of the nostril or abdominal muscle movement. Here, the breath as a physical stimulus would appear as the sense of touch. This initiates a spark at the sense organ and this causes physical and mental impacts, affecting our body and memory. This will also affect the future conditions of meditation.

Now, in addition to just targeting the breath, we also try to stay there. In order to do that, we need to be aware that we are with the breath. This situation is shown below.



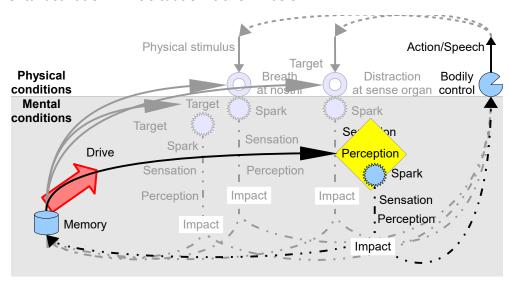
Note that here are two cycles of mental activation. The Cycle 1 (grayed) targets the breath as in the previous diagram and Cycle 2 (in black) targets the target of Cycle 1 (shown as Target₂ pointing to Target₁). Target₂ initiates the second spark (shown as Spark₂), which corresponds to the realization or awareness of the fact that we were targeting the breath. Here, we notice that Spark₂ occurs before any emotional or cognitive processes, including judgment, on Cycle 2. Then, spark₂ would more or less correspond to the notion of bare attention, as shown in an earlier section on Basic Breath Meditation. Again, we need to recognize that Cycle 2 (involving this "awareness") and Cycle 1 (involving the object of this awareness) have the identical structure. That is, bare attention is also a result of drive and targeting. In this respect, bare attention is not really a special process and not worthy of being singled out as the most important element of mindfulness. Since a conscious cycle, such as Cycle 2 above, could target any mental process, we can pay bare attention to basically any mental activity/process, including drive. Then, we might think that bare attention is enough to deal with the whole thing. But what is directing bare attention to different mental processes? There must be drive to target all these; then, we must notice that the present diagrams provide a fuller picture involving the connection among all these mental processes.

Now, each cycle of mental activation occurs in a split second; it will rise and fall in an instance. So, to maintain bare attention on the breath, we will need to continuously generate cycles of mental activation of the two kinds discussed in the previous paragraph. That is, Cycle 1 targeting the breath and Cycle 2 targeting the target of Cycle 1. As we can tell from our experience, maintaining this kind of concentration is extremely difficult. Our focus will slip and usually unconsciously, our (frequently unconscious) drive would be targeting something totally unrelated to the breath. This situation is shown below.



As we all know, it is unavoidable to experience some distracting physical stimuli. When there is one, our (unconscious) drive would target it and generate some impacts (shown in black). When this happens, we are most likely unaware of the situation. In addition, this cycle of mental activation may trigger a lot of other cycles of mental activations without our awareness but still capture our mind for a long time.

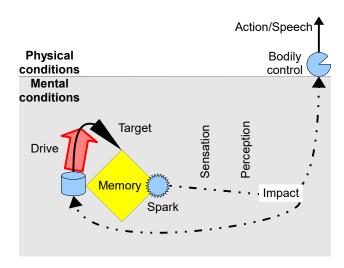
Then, at some point, our drive to stay focused on the breath may target one area of the out-of-control mental activation. This situation is shown below.



In the above diagram, the perception of a distraction is being targeted. At this point, we *realize* that we have been distracted and we will try to bring our attention back to the breath.

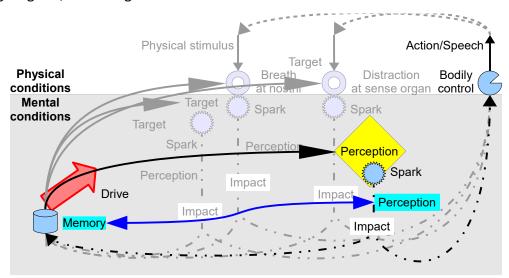
In addition to physical stimuli, a mental process can be the source of a distraction as well. For example, we may daydream. Or, some completely irrelevant thought may come up. In such a situation, drive may emerge to target a certain area of our memory, most likely subconsciously,

as shown in the following diagram.



This would cause a spark there and generates some impacts, just like any other cases discussed so far. Thus, even in this case, the cycle of mental activation is analogous.

There are a few points to note. First, without our drive to stay focused, we will not be able to realize any distraction and come back to the breath as a result. Thus, the most fundamental element of meditation is to *keep in mind* that we are meditating on the breath. Second, the reason we can realize the distraction is that we compare the current perception (of the distraction) with our goal in our memory (about staying on the breath), as shown in the following diagram, and recognize the difference.



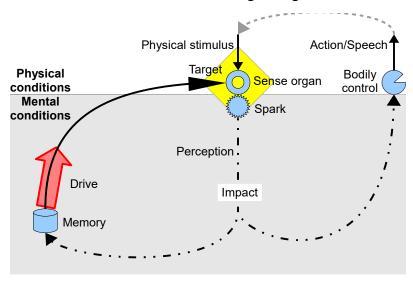
In a similar fashion, even a sensation (as has been discussed here) has an element of judgment, e.g., positive, negative, or neutral. Thus, even a sensation must be "compared" with some reference point. This comparison is certainly more primitive (e.g., possibly more dependent on the amygdala, the area of brain that register "fear") than cognitive processing involved in

perception (e.g., heavily involving certain areas of the cerebral cortex). Still, we can consider any reference basis as a part of "memory." Through such an evaluation process, the content of memory would be affected and changed. Thus, pretty much every mental activity after a spark would affect the memory. This is the nature of mental impact.

So, some sort of evaluation must be going on all the time during (even mindfulness) meditation, frequently referring to our memory. In fact, our perception, involving labeling, judgment, and other cognitive processes, would be impossible without constant reference to memory. These points suggest the following. A state corresponding to "bare attention" may happen at some point during an instance of mental activation. However, such a state does not seem to have any special significance. Our effort to pay attention is far from "bare" and impossible without some sort of evaluation (Thanissaro, 2012). There is one subtle point in this connection. Mindfulness is said to be a state without "judgment." However, as we noted above, there is some sort of "evaluation" within the process. Unlike the highly moralized version of judgment, the process of evaluation here does not need to (although it can) involve such moralization or attachment to some opinion.

Active Role of Mindfulness during Basic Breath Meditation

At this point, let us review basic breath meditation from a broader point of view, with the help of the new diagram. We practice meditation for a reason. Thus, it must be our memory that initiates the practice of meditation. Here is a basic diagram again.

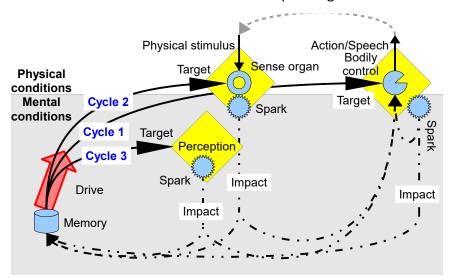


The motivation to meditate in our memory arises as drive and then targets a sense organ, e.g., the nostril for breathing, in an attempt to stay focused on the target. Thus, the most crucial point about meditation is actually our memory and drive. Without these, we won't be meditating. In addition, our memory must be an appropriate one. It must be based on a sound principle with a sound goal, as dubious ones will distract us during and after the meditation.

As discussed in the previous section, once we started a meditation session, we will experience the sense of awareness of targeting the breath, realizing a distraction, and eventually retargeting the breath. We noted that whenever we maintain our focus, whenever we deal with a distraction, and whenever we become aware of something, the cycle of mental activation begins with drive followed by targeting. That is, we are constantly making effort to pursue our goal, which is in our memory. We also noted that whenever we perceive something, it is an act of labeling, in comparison to what we have in our memory. Thus, even though there may be a state corresponding to bare attention, the entire process of meditation is far more than that. In a sense, mindfulness is practically all of the involved processes, including the active components of drive and targeting.

Among the many benefits of discussing the active aspects of mindfulness is the cultivation of keen awareness of mental activation, involving drive, target, spark, and impact. Such awareness would not be "bare" but rather involve a lot of effort and constant assessment. In fact, the understanding of mental activation and working with it in a "good" manner would be the key to improving our meditation skills.

Most basic meditation instructions, esp. those emphasizing the role of bare attention, would not let us control the breath. However, if we understand that meditation is an active process, it would be natural to involve some sort of try and error, i.e., *experiment*. For example, we could try to control breath in the following manner. Suppose that we are targeting the breath and perceiving its quality, e.g., long, short, deep, and shallow. We may also recognize whether it is pleasant, unpleasant, or neutral. At this point, we could target the relevant bodily control unit, e.g., diaphragm, to modify the breath. Then, we could target the perception of that change. The sequence from the breath modification is shown in the following diagram. Here, the cycles of mental activation are shown with the numerals corresponding to the order of activation.



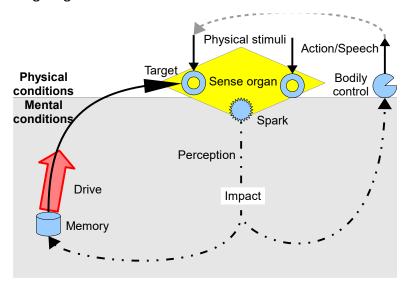
Note that the target of Cycle 1 is the bodily control unit, where a spark occurs, which in turn

affects the bodily control unit as a part of the impact of the spark.

Through this kind of practice, we can train our ability to make the best effort in terms of various mental components and processes. And with a lot of try and errors, we could make the breath more pleasant and easy to focus, resulting in a higher level of concentration.

With sufficient concentration on the breath, we can proceed to pay attention to our body. The idea is analogous. First, we need some drive to target a certain part of our body. Then, just as in the last diagram, we examine the sensations there. We can do this with various parts of our body. Each time, we begin with our drive and proceed with examining many cycles of mental activation.

As we gain the awareness of the body, we could use the breath and the body in a complex manner. For example, we could scan the body using the breath as the base. Gradually, we may also gain a broad access to the body. As Thanissaro Bhikkhu notes (2012), this could lead to an expansive *breadth* of concentration. A situation where multiple sense organs are targeted is shown in the following diagram.



This type of "expansive" concentration may contrast to the popular notion of concentration as an extremely narrow focus (e.g., Gunaratana, 2002). However, according to Thanissaro Bhikkhu (2012), this expansive notion seems to be what the Buddha taught and what could lead to a state of integrated mindfulness and concentration. In this regard, there is neither "concentration practice" nor "mindfulness practice." Both the "concentration aspect" and "mindfulness aspect" must be present and mutually supportive for the cultivation of our minds. There are a number of very different interpretations of the distinction/connection between concentration and mindfulness (e.g., Buddhaghosa, 1976; Gunaratana, 2009; King, 1980; Shankman, 2008). However, in the end, as we focus on the integration of concentration and mindfulness practice would

become almost meaningless (e.g., Thanissaro, 2013).

Through the practice outlined above, we could gain a very high level of concentration. At such a level, there may be just a few cycles of mental activation at a time. Then, it would be possible to closely observe these cycles. In addition, when a distracting cycle occurs, we could detect it right away. Thus, we could be aware of all of the present cycles of mental activation; we could even be aware of all the mental processes involved in each cycle. Then, in such a state, we have a high level of both concentration and mindfulness. This is the training ground for us. Then, we could experiment with our minds in any way we want.

At this point, we recall that everything begins with our drive. Some of them may be healthy and others are not; some of them will come to our attention and others will not. However, with a high level of concentration and mindfulness, we could be aware of all the instances of drive. Thus, first observing these instances of drive and then carefully filter out unhealthy ones, we could *train* our drive to be healthy. We need to know what is healthy, work hard to purify our minds, and evaluate the progress. This is quite different from approaches which promote bare attention; these are much more passive. As mentioned earlier, a *successful* meditation program which prominently places bare attention must involve other components that would correspond to the elements discussed so far.

With a good handle of mental conditions, as we discussed above, we could re-condition our minds by replacing unhealthy elements with healthy ones. This approach can naturally extend to walking meditation as well. Rather than passively noticing with bare attention, we could actively exert effort to do try-and-error experimentation during walking, or any other simple movement. Continuing this way, our minds could become more purified and the effects could show up in our daily lives outside meditation. In fact, our ability and effort outside meditation must be the main goal. With an analogous understanding of our mental activities, we will be able to re-condition our behavior, little by little. Eventually, not only being aware of what is happening, we could act and speak in a healthy way, based on our purified minds.

Often, we are told that mindfulness is to abandon control. The approach advocated in this essay is different; it is a way to develop "healthy" control, i.e., re-conditioning. However, even a healthy control would be associated with subtle suffering. So, once we gain truly good control of our minds through meditation and even outside meditation, we could indeed release the control. When that happens, we might be approaching the realm of unconditioning. Of course, we could focus on releasing control from the beginning. However, releasing control is also control, and probably the most formidable one. So, it seems more realistic to learn how to use control skillfully before being able to release control.

Now, bare attention (by itself) can be compared with an active approach to mindfulness in the following metaphor. Bare attention is like chasing a mouse wherever it goes (still better than not chasing); we will never really be able to get hold of it. On the other hand, if we were

actively engaged in the whole mental process of the mouse including its understanding and intention, we would know where it goes; we would no longer need to "chase" it. Here is another one. Bare attention is like practicing catching balls, instead of practicing hitting balls, in order to hit a home run. Surely, practicing catching balls does have certain benefits. We could still learn the nature of a home run; this would be impossible if we had never known baseball. But to hit a home run, we need to actually practice hitting.

This is roughly what I got from the Buddha through Thanissaro Bhikkhu (2012, 2013). To advance more, it would be best to read the original literature. However, even the modern literature, such as Thanissaro (2012), is still full of Buddhist terms and can be challenging. *Part 1* here can be a scaffolding to help modern meditators. In *Part 2*, we will survey the correspondence between the terminology of used in *Part 1* and the original Buddhist terminology.

Part 2: Buddhist Terminology

Right Mindfulness

In *Part 2*, we will actively seek the correspondence between the discussion in *Part 1* and Buddhist ideas. Here, we may occasionally make some bold (and possibly inaccurate) attempts in favor of simplicity.

As we noted, the most important element of meditation is remembering the goal and method. In the Buddhist context, this amounts to the understanding of two sets of principles, the Four Noble Truths and the Noble Eightfold Path, summarized in the following table.

	1. Suffering	1R		1P		1E			
7	2. Origin of Suffering	2	R		2P			2E	
ur 7	3. End of Suffering	3R		3P		3E			
Four Noble Truths (4NT)		4R		4P		4E			
		Realization		Penetration		Experimentation			
	4. Path Leading to the End of Suffering = Noble Eightfold Path (N8P)	1. Right View	2. Right Intention	3. Right Speech	4. Right Action	5. Right Livelihood	6. Right Effort	7. Right Mindfulness	8. Right Concentration

While we need to refer to the literature for more details (e.g., Moffitt, 2008; Rahula, 1974), a simplified description would be as follows. The Four Noble Truths (4NT) discusses (1) the nature of our suffering, including a broad range of dissatisfaction and pain, (2) its origin, (3) the possibility of ending it, and (4) how to achieve that. The Noble Eightfold Path (N8P) is the breakdown of the fourth Noble Truth, bundled into three categories: realization, penetration, and experimentation (more commonly referred to as wisdom, conduct, and meditation, respectively). The bundle of realization basically corresponds to understanding and applying the whole of the 4NT and the N8P. That of penetration is associated with our behaviors. That of experiment involves the practice leading to accomplishments.

Before proceeding, a few caveats are in order. Normally, the second bundle (penetration) is considered more as a prerequisite for advancing meditation. For example, it is often said that without ethical conduct, we cannot meditate properly. However, my view here is somewhat different. I think that the "right" behaviors are not what we enforce as prerequisites. Rather, they would emerge as a result of diligently experimenting with the mind and body (meditating). This is why I call this second bundle as "penetration," as a state of accomplishment. In a sense, realization, penetration, and experimentation can be seen in parallel to theory, game, and practice, respectively, of a certain, say, sports skill.

These three "characterizations" (realization, penetration, and experiment) can also be viewed in connection to a certain way of subdividing the 4NT. For each of the truths of the 4NT, we can observe three "insights," thus resulting in twelve insights for the whole of the 4NT (e.g., Moffitt, 2008; Sumedho, 1995). These three insights are realization, experimentation, and penetration, normally developed in this order. These are the same as the three characterizations used to

bundle the N8P above, only in different order. Although this is not the way Buddhist teachers discuss the 4NT and the N8P, it seems to make sense to set up a matrix intersecting the 4NT and the N8P in terms of realization, penetration, and experimentation as in the above table. For example, "1R" corresponds to the First noble truth focusing on the bundle/insight of realization.

Another point is that the term "realization" is used here in the following sense: to realize wisdom, there must be a *subject* of this experience. This contrasts with the term "wisdom," which sounds impersonal. On the other hand, "penetration" suggests a more impersonal state of accomplishment. The implication here is that from realization to penetration, the subject of this experience will eventually be dropped, analogous to the Buddhist notion of not-self (*anatta*).

After learning the 4NT and the N8P, we may feel that there is redundancy or circularity. One way to respond to this point is that the 4NT is a more analytic view and the N8P is more synthetic/constructive view of the same principle.

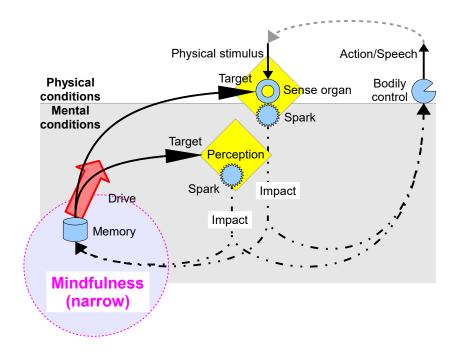
Let us now move to the seventh factor of the N8P, which is "right mindfulness." Here, the notion of mindfulness is qualified by the word "right," indicating that this is a special, "skillful" realization of mindfulness. However, the practical importance of right mindfulness in this context is that it needs to work with all the other factors of the N8P.

The most traditional element of right mindfulness is "memory" or *keeping things in mind*. In this sense, right mindfulness is to remember the wisdom components of the N8P and apply it to the training component.

Next, right mindfulness itself consists of three subcomponents as follows:

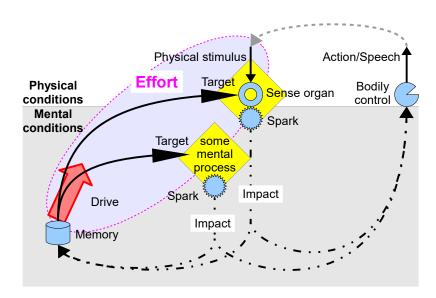
	Mindfulness/keeping in mind (sati)		
Right mindfulness (sammā sati)	Effort/ardency/diligence (ātappa)		
	Alertness/clear knowing/clear understanding (sampajañña)		

We will observe these three subcomponents in terms of our diagrams. First, in a narrow sense, "mindfulness" corresponds to memory as shown below. This subcomponent is shown as the shaded oval in the following diagram.



"Memory" here not only refers to conscious, explicit memory but also include subconscious, implicit/procedural memory. That is, even when we act and behave unconsciously, we may still be doing so because of our life experience, also reflecting our upbringing and societal influence, deeply ingrained in our body.

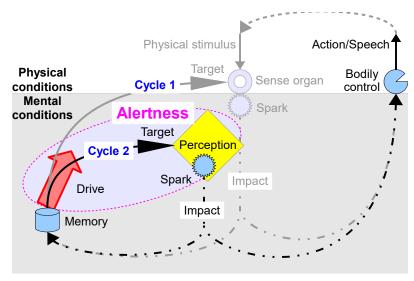
Then, "effort" involves drive and targeting among other things. Without making effort to select appropriate drive and properly targeting that drive, we will not be able to achieve our goals.



One obvious point is that this effort is actually closely related to right effort (sixth factor of the N8P), much like mindfulness is related to right mindfulness. On a smaller scale, we need effort

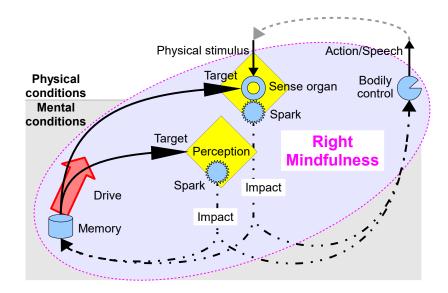
(a subcomponent of right mindfulness) to control the cycles of mental activation to develop right mindfulness. At the same time and on a broader scale, right effort assists right mindfulness to remember the necessary information.

Next, alertness can be considered as a process of intentionally targeting a mental process (of an earlier cycle), as we discussed in *Part 1*. The relevant area is shown in the shaded oval in the following diagram.



In a sense, bare attention most closely corresponds to a small part of alertness, roughly corresponding to a *conscious* instance of spark in our diagram

Finally, right mindfulness can be considered as a process of targeting a mental processes (what) in order to pursue the goal (why) through its understanding (how). It encompasses almost the entire part of the mental activities in the following diagram.



Then, this understanding of mindfulness is far broader than just "bare attention." When mindfulness (in the narrow sense), along with effort and alertness in a balanced way, is established within the seventh factor of the N8P, it would be considered "right mindfulness."

Interpreting Dependent Co-origination

In this section, we discuss the notion of dependent co-origination (also called dependent co-arising, interdependent co-arising, conditioned genesis, etc.) using our diagrams. Dependent co-origination is a Buddhist way of explaining the complex feedback loops involved in our mental activities as well as their environment. The complexity involved in dependent co-origination has also been interpreted in terms of the modern complex systems ideas (Thanissaro, 2008).

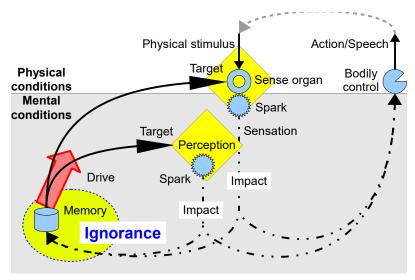
First, here is a list of the twelve factors involved in dependent co-origination:

- Ignorance
- Formations/Fabrications (sankhara)
- Consciousness
- Mind and Matter (nama/rupa)
- Sense/Mind Bases
- Contact
- Feeling
- Craving
- Clinging
- Becoming

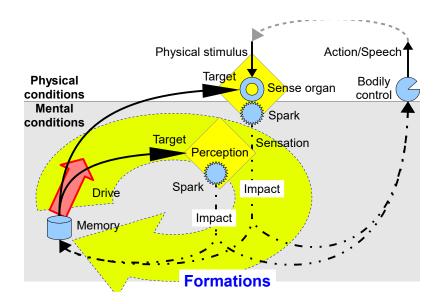
- Birth
- Aging/Dying

Often, these factors are presented in the form of a wheel, i.e., ignorance causes formations, formations cause consciousness, etc. However, the situation appears much more complex. In order to get a good idea about dependent co-origination, we will discuss each factor in the given order using our diagram.

First, "ignorance" is about *not* understanding the Four Noble Truths (4NT) and the Noble Eightfold Path (N8P). If we know the 4NT and the N8P, then, such knowledge, or wisdom, would be stored in our memory. And thus, ignorance is also a factor originating in our memory. Reflecting this, we can characterize the domain of ignorance at our memory, as shown in the shaded oval in the following diagram.



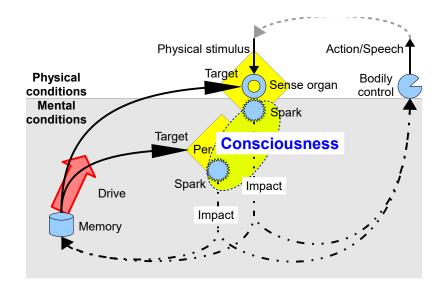
That is, if ignorance dominates our memory, our drive would be unskillful. The next factor is "formations" or "fabrications." Formations basically correspond to cycles of mental activation, as shown in the following diagram.



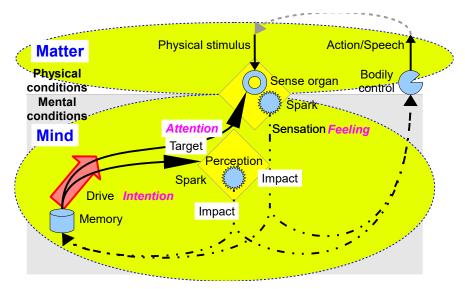
In *Part 1*, we discussed that impacts can be physical and mental. In Buddhist psychology, formations can be bodily, verbal, or mental. Bodily and mental formations correspond to our bodily and mental impacts. Verbal formations refer to thoughts and speech. Thoughts seem to be mental and speech seems to be a combination of bodily and mental. But we are not concerned about the classification of verbal formations in our diagrams.

Now, formations are described as volitional or intentional. It is quite straightforward to recognize this point with our diagrams because all the formations (or impacts) originate from drive, which *can* be considered as originating from some motivational force, be it conscious or not. In addition, when we hear that ignorance causes formations, we can see the causal relationship between memory and formations. Since ignorance and formations are generally considered as a preliminary conditions for other factors, these are also considered as occurring in the past. This may not seem exactly right because memory and formations are active all the time from the past to the future. However, by combining ignorance and formations, we could overview a single cycle, which might have occurred in the past. And at the end of a cycle of formation, it is quite possible that more ignorance would be accumulated.

We now move on to "consciousness," as the factor of receiving or registering various phenomena. Thus, consciousness here would correspond to the process at a spark in our diagram, as shown below.



In this respect, consciousness here is more specific than more common usages of the same term, e.g., consciousness as awareness. Now, consciousness does not appear as a consequence of formations in our diagram. However, any formation would affect consciousness in future paths. So, there shouldn't be any inconsistency. It seems that the presentation of consciousness at this position in the list is more or less preparatory for forthcoming factors. The next factor is mind and matter. These roughly correspond to our physical and mental conditions, as shown below.

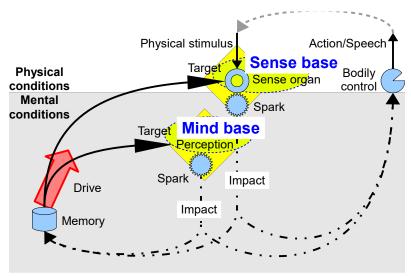


Note that the above diagram is slightly adjusted for the targeting of the sense organ in order to contain the two instances of targeting/attention within the mental condition/mind. Since the coverage of mind/matter is broad, its connection to the previous and following factors does not appear to be simplistic. It seems that this more or less lays out the mental processes in the mental conditions domain. One important point is that "mind" here is said to encompass feeling, perception, intention, contact, and attention. We will discuss contact, feeling, and

perception later as they are listed as independent factors. Here, "intention" and "attention" correspond to drive and target, respectively, in our diagrams. We didn't use these terms because we wanted to avoid possible confusion when these terms are used for potentially subconscious processes. In addition, these terms are used in the modern disciplines, e.g., psychology. By now, though, the use of these terms in Buddhist psychology must not be so surprising. Regardless of whether the drive is available to our awareness, it is indeed volitional and intentional in that without such a driving force, there won't be any mental activities. In other words, both intention and attention are active all the time. And these can be unskillful or skillful. It all depends on our effort.

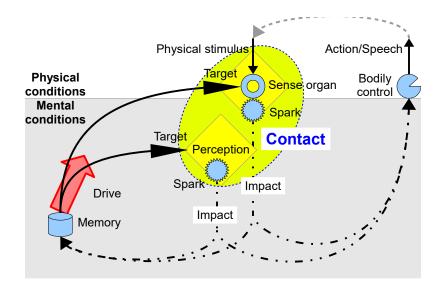
In some of Thanissaro Bhikkhu's writing (2008, pp. 33, 40), attention seems to be placed prior to intention. For example, inappropriate attention is placed side by side to ignorance. So, the presentation here may not be accurate. However, at this point, we will leave it this way.

The next factor is sense/mind bases. Here, a "sense base" refers to a sense organ and a "mind base" refers to a purely mental target of a drive. This is shown in the following diagram.



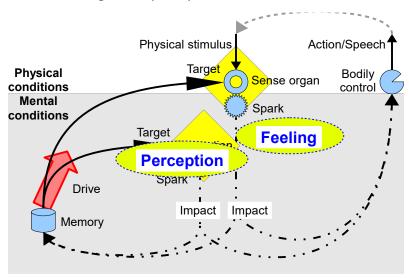
Although sense and mind bases belong to physical and mental conditions domains, respectively, their roles in a cycle of mental activation are analogous. As such, their roles with respect to other factors in dependent co-origination are analogous as well.

Then, a "contact" involves the intersection of sense/mind base and consciousness (spark), which are targeted, as shown in the following diagram.



After introducing consciousness, mind/matter, and sense/mind bases, contact defines where the current formation are taking place.

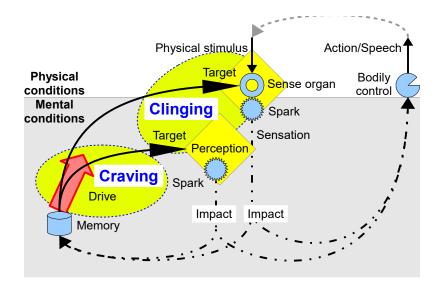
The next two factors are "feeling" and "perception," as shown below.



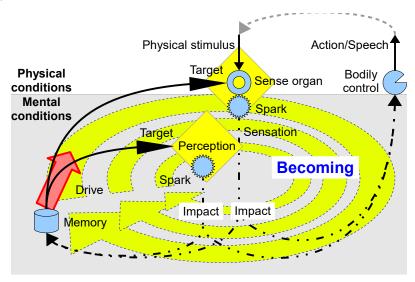
Feeling (or feeling tone), corresponding to our sensation, is about the first point on a formation/impact, where the contact is quickly evaluated as positive, negative, or neutral. Perception is just like what we have been referring to in *Part 1*.

Along with the twelve factors of dependent co-origination, we often encounter the notion of aggregates (*khandha*), involving mind, consciousness, feeling, perception, and formation. For our purposes, it seems sufficient to recognize that these are at the core of mental activation.

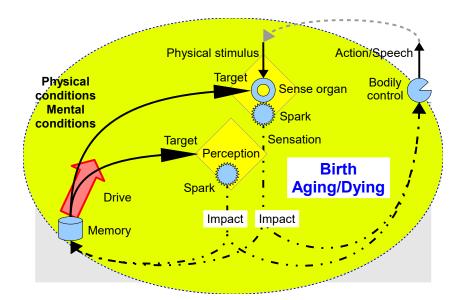
The next two factors, craving and clinging, are closely related. We can consider "craving" as excessively strong drive and "clinging" as inability to relinquish targeting a particular mental process. This is shown below.



Then, the next factor, "becoming," can be seen as a habituation of the patterns exhibited in the previous factors, as shown below.



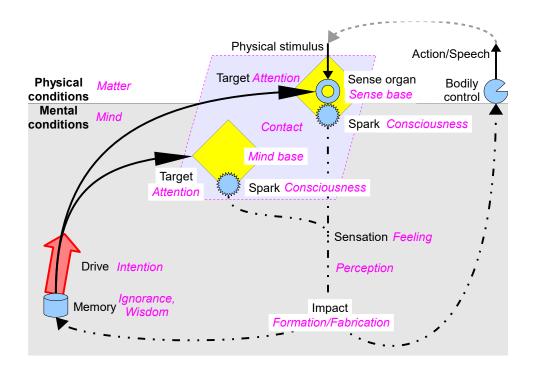
As the process repeats and habituates, a certain "identity," be it mental or physical, can be formed. Then, such an identity will lead to the next two factors: birth and aging/dying, a life of its own, again, be it mental or physical. This is just what we commonly perceive as a result of the previous factors. Since this encompasses the whole diagram, it is shown simplistically as follows.



This way, we can visualize the correspondence between our diagrams and the twelve factors of dependent co-origination. In a sense, the twelve factors are more like multiple cycles of mental activation in our diagram, albeit not just a straightforward repetition. This view has some similarity to various interpretations of the twelve factors as multiple cycles (as discussed in Gethin, 1998) and may also be related to the notion of scalability in a complex system with different lengths of cycle (Thanissaro, 2008, pp. 7, 25).

One application of the twelve factors of dependent origination is that we can cut any of the links found in these factors to be saved from the suffering due to ignorance. Any of these cases would amount to replacing ignorance with wisdom (Thanissaro, 2008, p. 31).

Finally, the correspondence between our terminology used in *Part 1* and Buddhist terminology is summarized in the following diagram. Here, the Buddhist terms are shown in italic.



Using this diagram, the discussion in *Part 1* can be translated into that in the Buddhist literature. This way of analyzing our mental activation could also help us deal with the notion of "self" (e.g., Olendzki, 2010; Smith, 2010), as we can see the mental activities in an objective manner.

Conclusion

This essay begins with the limitations associated with overly emphasizing "bare attention" as the most prominent element of mindfulness. That is, even with increased awareness, we may still experience inability to overcome various negative feelings and other suffering observed through bare attention. In response, we closely examine instances of mental formations ("activation" in *Part 1*) involving various mental processes and recognize the importance of "intention" ("drive" in *Part 1*) and "attention" ("targeting" in *Part 1*). Within this framework, everything begins with an intention (be it conscious or subconscious) from memory, which develops into attention to a particular mental process. The goal of meditation is, then, to train the course of mental formations so that the current meditation session becomes wholesome." In turn, this training is directed to our activities outside meditation in a way our lives themselves become more wholesome. In the end, we could realize that even wholesome states, cultivated in this manner, are associated with subtle suffering; with this realization, we may eventually be able to experience a total release from suffering.

In *Part 1*, we go through the above idea with our diagrams, inspired by Thanissaro Bhikkhu's exposition of "right mindfulness" (2012). In *Part 2*, we explore the connection between our terminology and Buddhist terminology so that we can bridge between the two expositions.

Hopefully, the ideas and diagrams in this essay are useful for other meditators and also for

reading the relevant Buddhist literature, including Thanissaro (2012). This essay may be revised if necessary.

References

- Analayo. 2003. *Satipatthana: The Direct Path to Realization*. Birmingham, UK: Windhorse Publications.
- Analayo. 2013. Perspectives on Satipatthana. Birmingham, UK: Windhorse Publications.
- Bhikkhu Bodhi. 2011. What does mindfulness really mean? A canonical perspective. *Contemporary Buddhism: An Interdisciplinary Journal*, 12(1), 19-39.
- Buddhaghosa. 1976. *The path of purification: Visuddhimagga* (originally written approximately in 430 CE). Berkeley, CA: Shambhala Publications.
- Dreyfus, Georges. 2011. Is mindfulness present-centred and non-judgmental? A discussion of the cognitive dimensions of mindfulness. *Contemporary Buddhism*, 12(1), 41--54.
- Gethin, Rupert. 1998. The foundations of Buddhism. Oxford: Oxford University Press.
- Gunaratana, Henepola. 2002. *Mindfulness in plain English*, Updated and Expanded ed. Boston: Wisdom Publications.
- Gunaratana, Henepola. 2009. Beyond mindfulness in plain English: an introductory guide to deeper states of meditation. Boston: Wisdom Publications.
- Kabat-Zinn, Jon. 1990. Full catastrophe living: using the wisdom of your body and mind to face stress, pain, and illness. New York: Delacorte Press.
- King, Winston L. 1980. *Theravada meditation: the Buddhist transformation of yoga*. University Park, PA: Pennsylvania State University Press.
- Moffitt, Phillip. 2008. Dancing with life: Buddhist insights for finding meaning and joy in the face of suffering. New York: Rodale.
- Nyanaponika Thera. 1965. The heart of Buddhist meditation (Satipatthana): a handbook of mental training based on the Buddha's way of mindfulness, with an anthology of relevant texts translated from the Pali and Sanskrit. Boston: Red Wheel/Weiser.
- Olendzki, Andrew. 2010. *Unlimiting mind: the radically experiential psychology of Buddhism*. Boston: Wisdom Publications.
- Olendzki, Andrew. 2011. The construction of mindfulness. *Contemporary Buddhism: An Interdisciplinary Journal*, 12(1), 55-70.
- Purser, Ronald E., & Milillo, Joseph. 2014. Mindfulness Revisited: A Buddhist-Based Conceptualization. *Journal of Management Inquiry*, May 12, 2014, 1-22.

- Rahula, Walpola. 1974. What the Buddha taught (Rev. ed.). New York: Grove Press.
- Shankman, Richard. 2008. *The experience of samadhi: an in-depth exploration of Buddhist meditation*. Boston: Shambhala.
- Smith, Rodney. 2010. *Stepping out of self-deception: the Buddha's liberating teaching of no-self.*Boston: Shambhala.
- Sujato, Bhikkhu. 2005. A History of Mindfulness: How Insight Worsted Tranquillity In The Satipatthana Sutta. Taiwan: The Corporate Body of the Buddha Education Foundation.

 Retrieved from http://santifm.org/santipada/wp-content/uploads/2012/08/A History of Mindfulness_Bhikkhu_Sujato.pdf (June 2014).
- Sumedho. 1995. *The mind and the way: Buddhist reflections on life*. Boston: Wisdom Publications.
- Thanissaro Bhikkhu. 2008. The Shape of Suffering: A Study of Dependent Co-Arising. Retrieved from http://www.accesstoinsight.org/lib/authors/thanissaro/shapeofsuffering.pdf (August 2014).
- Thanissaro Bhikkhu. 2012. *Right Mindfulness: Memory & Ardency On The Buddhist Path*. Retrieved from http://www.accesstoinsight.org/lib/authors/thanissaro/rightmindfulness.pdf (June 2014).
- Thanissaro Bhikkhu. 2013. *With Each & Every Breath: A Guide To Meditation*. Retrieved from http://www.dhammatalks.org/Archive/Writings/EachAndEveryBreath_v130123.pdf (June 2014).
- Wallace, B. Alan, & Bhikkhu Bodhi. 2006. *The Nature of Mindfulness and Its Role in Buddhist Meditation*. Retrieved from http://shamatha.org/sites/default/files/Bhikkhu Bodhi Correspondence.pdf (June 2014).
- Williams, Mark G., & Kabat-Zinn, Jon, Eds. 2013. *Mindfulness: Diverse Perspectives on its Meaning, Origins and Applications*. London: Routledge.